

**APPENDIX I. MARKED UP VERSION OF SPECIFICATION AND CLAIMS TO
SHOW CHANGES MADE**

The specification at the paragraph beginning page 1, line 4.

This application is a continuation of U.S. Serial Number 09/099,301, filed June 18, 1998,
which claims priority to U.S. Provisional Application, Serial No. 60/050,405, filed on June 20,
1997, the text of which is expressly incorporated herein.

The specification at page 6, lines 4-23.

Exon 2: 5'-TCATGCTGGATCCCCACTTTTCCTCTTG-3' (SEQ ID NO: 1)

5'TGGCCTGCCCTTCCAATGGATCCACTCA-3' (SEQ ID NO: 2)

Exon 3: 5'-AATTCATGGGACTGACTTTCTGCTCTTGTC-3' (SEQ ID NO: 3)

5'-TCCAGGTCCCAGCCCAACCCTTGTC-3' (SEQ ID NO: 4)

Exon 4: 5'-GTCCTCTGACTGCTCTTTTCACCCATCTAC-3' (SEQ ID NO: 5)

5'-GGGATACGGCCAGGCATTGAAGTCTC-3' (SEQ ID NO: 6)

Exon 5: 5'-CTTGTGCCCTGACTTTCAACTCTGTCTC-3' (SEQ ID NO: 7)

5'-TGGGCAACCAGCCCTGTCGTCTCTCCA-3' (SEQ ID NO: 8)

Exon 6: 5'-CCAGGCCTCTGATTCCTCACTGATTGCTC-3' (SEQ ID NO: 9)

5'-GCCACTGACAACCACCCTTAACCCCTC-3' (SEQ ID NO: 10)

Exon 7: 5'-GCCTCATCTTGGGCCTGTGTTATCTCC-3' (SEQ ID NO: 11)

5'-GGCCAGTGTGCAGGGTGGCAAGTGGCTC-3' (SEQ ID NO: 12)

Exon 8: 5'-GTAGGACCTGATTTCCCTTACTGCCTCTTGC-3' (SEQ ID NO: 13)

5'-ATAACTGCACCCTTGGTCTCCTCCACCGC-3' (SEQ ID NO: 14)

Exon 9: 5'-CACTTTTATCACCTTTCCTTGCCTCTTTCC-3' (SEQ ID NO: 15)

5'-AACTTTCCACTTGATAAGAGGTCCCAAGAC-3' (SEQ ID NO: 16)

Exon 10: 5'-ACTTACTTCTCCCCCTCCTCTGTTGCTGC-3' (SEQ ID NO: 17)

5'-ATGGAATCCTATGGCTTCCAACCTAGGAAG-3' (SEQ ID NO: 18)

Exon 11: 5'-CATCTCTCCTCCCTGCTTCTGTCTCCTAC-3' (SEQ ID NO: 19)

5'-CTGACGCACACCTATTGCAAGCAAGGGTTC-3' (SEQ ID NO: 20)

The claims

1. (Amended) A method of performing multiple polymerase chain reactions in a single vessel, comprising:

priming DNA synthesis of at least two amplicons on a template in a vessel with at least two sets of primers, wherein the primers are present in the vessel at a predetermined molar ratio, wherein the molar ratio is described by:

$$C_A = C_L (L_A \div L_L)^2$$

wherein C_A is the concentration of primers for an amplicon A; wherein C_L is the concentration of primer for the longest amplicon; wherein L_A is the length of the amplicon A; and wherein L_L is the length of the longest amplicon, and wherein the amplicons are distinct.

10. The method of claim 9 wherein the primers are present in the following molar ratios: exon 2 (89.4): exon 3 (26.9): exon 4 (450): exon 5 (245.8): exon 6 (138.3): exon 7 (101.8): exon 8 (193.0): exon 9 (70.8): exon 10 (146.5): exon 11 (177.3).

11. (Amended) A method of performing multiple polymerase chain reactions in a single vessel, comprising:

priming DNA synthesis on a genomic p53 template in a vessel with ten sets of

primers which amplify exons 2-11 of p53, wherein the primers are shown in SEQ ID NOS: 1-20, wherein the primers are present in the vessel at the following molar ratios: exon 2 (89.4), exon 3 (26.9), exon 4 (450), exon 5 (245.8), exon 6 (138.3), exon 7 (101.8), exon 8 (193.0), exon 9 (70.8), exon 10 (146.5), exon 11 (177.3).

13. (Amended) The kit of claim 12 wherein the molar ratio of the concentrations of the primers is described by:

$$C_A = C_L (L_A \div L_L)^2$$

wherein C_A is the concentration of primers for an amplicon A; wherein C_L is the concentration of primer for the longest amplicon; wherein L_A is the length of the amplicon A; and wherein L_L is the length of the longest amplicon.

15. (Amended) A [mixture] composition of primers for performing multiplex polymerase chain reaction of at least two amplicons, wherein the primers [are present in the] consist of a mixture at a predetermined molar ratio to each other, wherein the molar ratio of the concentrations of the primers is described by:

$$C_A = C_L (L_A \div L_L)^2$$

wherein C_A is the concentration of primers for an amplicon A; wherein C_L is the concentration of primer for the longest amplicon; wherein L_A is the length of the amplicon A; and wherein L_L is the length of the longest amplicon, wherein the amplicons are distinct.